

### **Preliminary Remarks**

Applicant requests consideration of the currently pending claims in view of all the art of record in both the parent application (see MPEP §2001.06(b)) and the present application.

New claims 19-22 presented in the present application correspond to claims 14 – 16, 18 in the parent application.

In the July 3, 2003 Office Action of the parent application, claim 14 of the parent application (corresponding to claim 19 in the present application) was rejected under 35 U.S.C. §112 as being vague and indefinite because the limitations of the claims are not tied with the preamble in the claim. Applicants have revised the preamble and Applicants assert that claim 19 complies with §112 because the limitations of the claim are clear and definite. The preamble of the claim recites a “router having a plurality of interfaces” and the body of the claim recites “assigning a number to each of the interfaces”. This limitation of the claim contains a clear reference to the preamble. It is asserted that the remaining limitations of claim 19 are clear and definite. If the Examiner persists in this rejection, Applicants respectfully request an explanation of what part of the claim is unclear, why the Examiner considers the limitations of the claim not “tied with the preamble in the claim”, and why the limitations which are allegedly not “tied with the preamble in the claim” render the claim vague and indefinite. This request for clarification is necessary so that Applicants may respond to any further §112 rejection.

In the July 3, 2003 Office Action of the parent application, claims 14 and 18 of the parent application (corresponding to claims 19 and 22 in the present application) were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,314,105 (Luong) in view of U.S. Patent No. 5,583,862 (Callon). For the reasons discussed below, claims 19 and 22 of the present application are allowable over Luong and Callon.

Luong, at col. 6, lines 43 – 58, merely discloses a non-broadcast multi-access (NBMA) subnetwork within which routers that have common network identifiers are capable of communicating with each other within the same NBMA subnetwork. There is no disclosure in Luong of the claim 19 limitations of “assigning a number to each of the [router] interfaces” or of “grouping the interfaces into connectivity classes”. If the

Examiner persists in the rejection over Luong, it is respectfully requested that the Examiner specifically identify 1) the specific disclosure in Luong corresponding to the “number” assigned to the interfaces as claimed in claim 19 and 2) the specific disclosure in Luong corresponding to the “grouping” of the interfaces into “connectivity classes”. Applicants assert that the mere disclosure in Luong of a first set of routers having a first network identifier (communicating to form a first subnetwork) and a second set of routers having a second network identifier (communicating to form a second subnetwork) does not disclose the steps of “assigning...” and “grouping ...” as claimed in claim 19. Finally, the Office Action in the parent application admits that Luong does not disclose the step of encoding information identifying the interfaces and the connectivity classes into a link state packet and transmitting the link state packet to other routers in the communication network.

For the missing elements of “encoding” and “transmitting”, the Office Action in the parent application relies on Callon. Callon describes a routing protocol in which link state packets propagated by routers include information which indicates whether a given network is a directly reachable one, or one that is a virtual network only partially connected to the router. In accordance with Callon, the routers implementing the protocol will maintain in their routing tables this virtual network identification information about which networks are “directly reachable” by the other routers in the system and which ones are merely “address served” by the other routers in the internetwork environment. Thus, while Callon describes transmitting information using the link state packets, this information is not the same as the information transmitted in accordance with claim 19. The “directly reachable” information and the “address served” information sent in the link state packets of Callon are very different from the encoded information identifying interfaces and connectivity classes as transmitted by link state packets of claim 19.

The combination of Luong and Callon does not render claim 19 obvious. First, for the reasons described above, Luong does not disclose the steps of “assigning a number to each of the [router] interfaces” or of “grouping the interfaces into connectivity classes”. Therefore, a combination of Luong and Callon would not result in the claimed invention. Further, even if the disclosure in Luong did correspond to the claimed

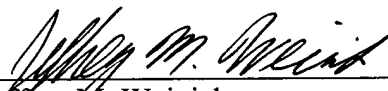
assigning of numbers to interfaces and the grouping of interfaces into connectivity classes, there is no suggestion in Luong that this information should be transmitted to other network routers. As such, there would be no motivation for one skilled in the art to look for a method for transmitting the information. Therefore, there is no motivation to use Callon's technique of transmitting information via link state packets.

For the reasons discussed above, claim 19 is allowable over the cited art.

Claims 20-22 are dependent upon an allowable independent claim and are therefore also allowable.

Applicant requests allowance of all pending claims.

Respectfully submitted,

  
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